

Weekly Report

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Projects

Visual SVM

On Tuesday I discussed with Prof. Chen about the current progress.

- **Migration of Old Views** Several views and interactions designed in the VIS 2014 will be migrated into current version:
 - **Coordinate View** which displays the dimension weights of the current projection direction;
 - **Model Selection View** which shows a list of existing trained models for the user to select which one should be activated and showed in the projection view.
- **Discussion on Visualizing Non-linear decision boundaries** Currently the Isomap result of the support vectors are presented in a scatterplot view. The problem are that:
 - The support vectors from different two classes are mixed together, hence the decision boundary is hard to display;
 - the cooperation between the isomap view and the projection view should be carefully designed.

Plan for the Next Week

The next step is to add a new boundary view which utilizes a triple-layered 3-D design. The decision boundary and support vectors from two classes forms three different layers. In the next week I will change the interface layout and implement the boundary view.